

# Comparisons of Job Characteristics

**Focus Occupation: Database Administrators (15-1061)**

**Associated Occupation: Computer Software Engineers, Applications (15-1031)**

- Compare Knowledge
- Compare Skills
- Compare Abilities
- Compare Detailed Work Activities
- Compare Tools and Technologies

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

## Knowledge

**Similarity of Focus Occupation to Associated Occupation: 88**

**Focus Occupation: Database Administrators (15-1061)**

**Associated Occupation: Computer Software Engineers, Applications (15-1031)**

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Computers and Electronics	8.4	23.8	19.9	<<	Extensive education and/or training may be required
Mathematics	9.2	15.4	11.4	<<	Extensive education and/or training may be required
Engineering and Technology	5.7	10.1	8.5	<	Expanded education and/or training may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Skills

**Similarity of Focus Occupation to Associated Occupation: 74**

**Focus Occupation: Database Administrators (15-1061)**

**Associated Occupation: Computer Software Engineers, Applications (15-1031)**

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Programming	2.2	14.6	9.9	<<	Extensive development of skills in this area may be required
Complex Problem Solving	9.1	14.1	11.9	<	A higher skill level may be required
Troubleshooting	4.5	13.5	8.1	<<	Extensive development of skills in this area may be required
Systems Evaluation	6.4	13.4	10.4	<<	Extensive development of skills in this area may be required
Systems Analysis	6.5	13.3	10.6	<	A higher skill level may be required
Mathematics	6.2	12.0	8.9	<<	Extensive development of skills in this area may be required
Operations Analysis	5.0	11.4	9.6	<	A higher skill level may be required
Technology Design	2.6	10.3	6.1	<<	Extensive development of skills in this area may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

Abilities	Similarity of Focus Occupation to Associated Occupation: 97				
Focus Occupation: Database Administrators (15-1061) Associated Occupation: Computer Software Engineers, Applications (15-1031)					
Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Deductive Reasoning	10.6	13.6	11.6	<	Some improvement in abilities may be required
Mathematical Reasoning	6.3	12.4	9.7	<	Some improvement in abilities may be required
Fluency of Ideas	7.6	11.9	9.9	<	Some improvement in abilities may be required
Number Facility	6.3	11.2	8.9	<	Some improvement in abilities may be required
Category Flexibility	9.0	11.1	11.0	0	Current ability level may be sufficient
Originality	7.6	10.8	9.8	<	Some improvement in abilities may be required
Selective Attention	8.7	10.5	9.8	0	Current ability level may be sufficient
Speed of Closure	5.9	8.1	6.2	<	Some improvement in abilities may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common	Similarity of Focus Occupation to Associated Occupation: 91
Focus Occupation: Database Administrators (15-1061) Associated Occupation: Computer Software Engineers, Applications (15-1031)	
Work Activities	Exclusivity of Activity
Adjust computer operation system	84
Communicate technical information	4
Design data security systems	89
Develop computer performance standards	87
Develop mathematical simulation models	70
Develop or maintain databases	30
Develop tables depicting data	33
Evaluate computer system user requests or requirements	81
Follow data security procedures	77
Follow data storage procedures	75
Install hardware, software, or peripheral equipment	89
Monitor computer operation	85
Program mainframe computer	84

Provide technical computer training	82
Revise or correct errors in computer programs, software, or systems	85
Test computer programs or systems	78
Use computer networking technology	81
Use computer programming language	82
Use computers to enter, access or retrieve data	3
Use knowledge of mainframe computers	78
Use project management techniques	47
Use spreadsheet software	18
Write computer software, programs, or code	84
Write documentation for computer programming	87

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Tools and Technologies that Both Occupations Have in Common

**Similarity of Focus Occupation to Associated Occupation:** 88

**Focus Occupation: Database Administrators (15-1061)**  
**Associated Occupation: Computer Software Engineers, Applications (15-1031)**

Tools and Technologies	Exclusivity
Computers	1
Content authoring and editing software	1
Data management and query software	1
Development software	4
Industry specific software	1
Network applications software	1
Networking software	21
Operating environment software	12
Security and protection software	30
Utility and device driver software	17

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.